

# South African Medical Journal

Organ of the Medical Association of South Africa



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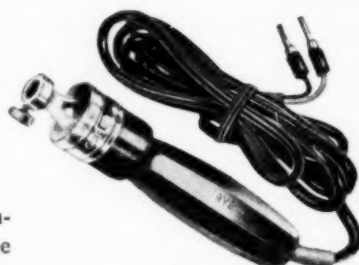
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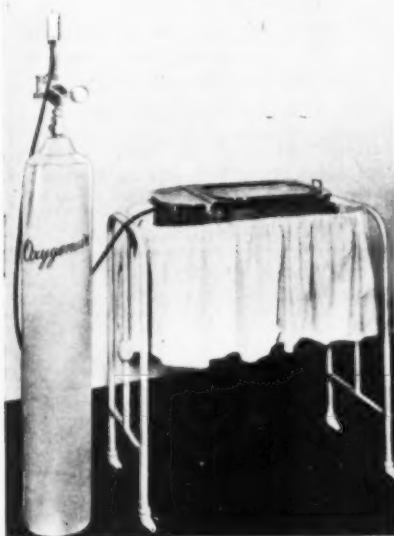


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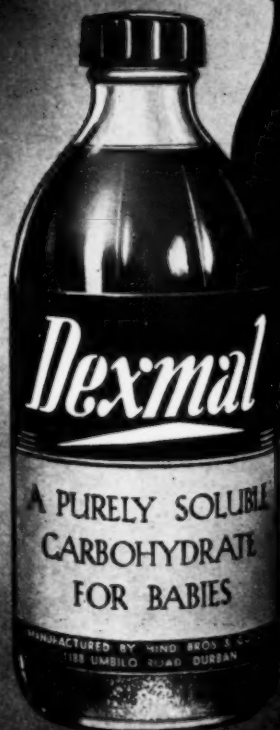
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## Suid-Afrikaanse Tydskrif vir Geneeskunde

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### TOPICAL AUREOMYCIN (OILY SUSPENSION) IN OPHTHALMOLOGY\*

#### FIRST REPORTS ON 47 CASES

R. A. TROPE, M.B., B.Ch. (RANDI), D.O.M.S., R.C.P. & S. (ENG.)

Johannesburg

Following the dramatic results obtained in treating cases of trachoma with the topical administration of aureomycin in oily suspension which I reported previously in this Journal (in press) it was decided to employ this drug in other inflammatory conditions of the eye in order to evaluate its potency as a therapeutic agent in ophthalmology.

The Aureomycin was used, as reported previously, in a 0.5% suspension in Ol. Ricini and administered by instillation into the conjunctival sac. Forty-seven cases have been treated, of which 17 were cases of trachoma in the various stages while the remainder were inflammatory conditions of uncertain etiology.

necessitated by the effort to maintain the potency of the antibiotic.

*Conjunctivitis:* These were cases of acute and mucopurulent conjunctivitis and one follicular conjunctivitis. All were treated as outpatients with uniformly good results within seven days.

*Blepharitis:* Two cases of squamous blepharitis and one of ulcerative blepharitis were treated. All cleared up rapidly and uneventfully.

*Trachoma:* As shown in the summary table five of these cases were stage I and stage II. The results were dramatic. In none of these cases was it necessary to express follicles. Pannus reacts amazingly to this drug

TABLE I

Clinical Condition	No. of Cases	Results	Remarks
Acute conjunctivitis	8	Good	Treated as outpatients.
Follicular conjunctivitis	1	Good	Treated as outpatients.
Blepharitis	3	Good	Treated as outpatients.
Trachoma I	3	Good	Results dramatic in all cases. Pannus regressed. Scars and sequelae permanent and must be treated separately.
Trachoma II	2	Good	
Trachoma III	10	Good	
Trachoma IV	2	Good	
Corneal ulcer	5	Good	Uncomplicated cases.
Dendritic ulcer	1	Good	Well healed nebulae.
Hypopyon ulcer	1	Good	
Lacerated cornea	2	Good	Previously treated with penicillin. 2-3 weeks. Improvement in 2 cases.
Superficial punctate keratitis	3	Good	
Herpes cornea febrilis	1	Good	
Acute marginal vascular keratitis	1	Good	
Desciform keratitis	1	Good	
Iridocyclitis	3	Doubtful	

*Commentary on Cases:* Of 47 cases of inflammation of uncertain etiology the results were good in 44 cases, where the cornea and external structures of the eye were involved. In corneal conditions this is especially encouraging as the aureomycin was suspended in oil, and not in an oil in water emulsion where the absorption of the drug would be of much higher degree. This was

\* From the Department of Ophthalmology, Krugersdorp Hospital.

and at this stage there has been no recurrence of trachoma in any case treated. As the use of this form of Aureomycin commenced in March of this year and there has been no indication of recurrence in any case of trachoma treated here, we can now begin to feel hopeful of at last having in our possession a therapeutic agent of great significance. Five months is still too short a time to allow of accurate assessment of its value, but the indications are that we have taken a definite step forward.

The scars and distortions produced by trachoma are permanent and have not, with one exception, reacted to treatment with the drug. This exception, reported previously, was in a case of trichiasis which apparently followed spastic entropion.

**Corneal Ulcers:** Five cases of corneal ulceration reacted rapidly, with no untoward effects, to instillation of oily aureomycin. Guttæ Atropinae 1.0% was used coincidentally.

**Dendritic Ulcer:** One case was treated with good result. This was not a fresh case but a recurrence of a case previously carbolicized.

**Hypopyon Ulcer:** The patient had a corneal ulcer which followed an injury to his eye. He had been carbolicized and treated several days before appearing at hospital. On examination he had a central corneal ulcer with hypopyon filling a quarter of the anterior chamber, and a 'hazy' cornea. He was treated by hourly instillation of 2 minims of oily Aureomycin into the eye, with atropin drops and hot spooning. In addition, intramuscular injections of 600,000 units of penicillin in suspension were given twice daily. Cure took place in a week. The instillations of aureomycin commenced only 2 days after admission (replacing penicillin drops). It is my opinion that the patient was insensitive to penicillin, as no appreciable change had taken place in the first two days. The final result was a corneal nebula.

**Lacerations of the Cornea:** Two cases were treated. One appeared to be infected, being complicated by a mucopurulent discharge. Healing was uneventful.

**Superficial Punctate Keratitis:** All three cases were characterized by several small points of keratitis involving the epithelial surface, and all reacted well.

**Herpes Cornea Febrilis:** One case in an infant reacted rapidly to local instillation of oily aureomycin.

**Acute Marginal Vascular Keratitis:** This patient had not benefited from previous treatment with penicillin. The patient suffered from photophobia and lacrimation

and on examination presented the appearance of what can best be called a non-specific vascular marginal keratitis with the ingrowth of large fleshy vessels. Treatment with oily aureomycin and atropin drops produced a rapid resolution within two weeks. The patient who had to attend regularly for some two months was instructed to return at the first sign of recurrence. He has not returned, and it may be assumed that there has been no recurrence.

**Disciform Keratitis:** One patient was treated for this condition with an excellent result in under three weeks. During the first week no change was apparent but during the next fortnight the opacity cleared up rapidly. In this case the patient was given a bottle of the suspension and although hospitalized was instructed to apply the drops himself every hour when awake. Atropin was instilled once daily.

**Iridocyclitis:** Three cases were treated, with slight improvement in two cases. It is my opinion that the aureomycin exerted no influence on the disease in these cases.

#### SUMMARY

Forty-seven cases were treated with oily suspension of aureomycin instilled into the eye. In no case was aureomycin given by mouth. In those cases in which the cornea and conjunctiva were affected the results have been very gratifying.

In three cases when the inner structures of the eye were involved there appears to have been no effect.

The result of five months of trial of aureomycin in oily suspension appears to warrant the opinion that we have a drug which occupies a valuable place in ophthalmology and which, in view of its effects on trachoma, promises beneficial social and economic effects to our country.

I wish to thank Dr. I. Frack, Superintendent of Krugersdorp Hospital, Dr. J. Taussig, head of the Ophthalmic Department, and Dr. O. Cronje, House Surgeon, for their encouragement and co-operation in following this investigation.

## SOME OBSERVATIONS CONCERNING CAUSE OF DEATH AND SUB-ECONOMIC HOUSING\*

### A NOTE ON THE NEED FOR RESEARCH

F. M. L. STOKER

Lecturer in Social Work, Rhodes University College

The thesis that Sub-Economic Housing is necessarily correlated with improved health standards is, under certain circumstances, grossly misleading, for it is clear that the opposite effect can be produced.

Methods of determining, with any degree of certainty, the health of living members of fairly large populations have yet to be devised, so that it is natural that in the past Medical Officers of Health should have viewed both

slum clearance and the provision of sub-economic housing with unqualified approval.

This attitude towards the Government-subsidized building programme in Great Britain between the two World Wars was sharply challenged by Dr. G. C. M. M'Gonigle and Dr. J. Kirby in *Poverty and Public Health*, for these two Medical Officers of Health demonstrated, conclusively, that the ability to purchase adequate nutrition, and not merely healthy environment and good housing, was the basic determinant of health. The bare provision, however, of an adequate per capita income

\* Indebtedness is gratefully acknowledged to the National Council for Social Research for assistance in pursuing this inquiry

will not necessarily result in optimum health for the family, as Rowntree has shown in *Poverty, a Study of Town Life*.

The problem of determining as accurately as possible the effect which the impact of sub-economic housing has on a given section of the Coloured population of a Sub-Economic Housing Estate of 1,500 houses, over a period of roughly 10 years (and, at the same time, of evolving a technique requiring little special apparatus for its use) raised the whole question of the apparently insuperable difficulties in the way of attempting to measure the health of any population in objective terms,<sup>1</sup> it being clear that no methods free from serious defects have, as yet, been devised.

It was decided, therefore, to approach the problem from the analysis of the most reliable data available: the official register of 'Causes of Death' for the Municipal area. Unsatisfactory as these records are in many respects,<sup>2</sup> most authorities would appear to regard them as the most reliable available.

There is, however, a serious difficulty in the way of using standard death rates in the present instance. The normal calculation of death rates per 1,000 of the population pre-supposes that the size of the population in question is ascertainable within reasonable limits of error; for such a method of calculation and comparison could be grossly misleading where no satisfactory method was possible of arriving at a reliable figure as to the size of the population. In the area under consideration the calculation of death rates defies computation, as there is no possible method of discovering the number of sub-tenants, authorized and unauthorized, at any given time, and, moreover, the size of the occupying biological families probably varied considerably during the period.

It is postulated that an alternative method (suitable for use when, as in the present instance, the size of the population cannot be determined satisfactorily), would be to compare the percentage of the total deaths due to a specific disease in the chosen racial group (as contained

in the Medical Officer of Health's Annual Reports for the City), with the percentages of deaths, for the same disease, in the total deaths registered for the same racial group residing in any area under consideration. This comparison, coupled with that of the Infantile Mortality Rates for both areas, might bring to light any significant deviations occurring e.g. under Sub-Economic Housing, though it may not reveal all the causative factors.

From the Medical Officer of Health's point of view, the advantages of such a method for inclusion in his Annual Reports, spring from the fact that this data, with reference to each racial group, is collected and analysed yearly, so that the extra work required to ascertain the changes in the relative rates in special areas, over a period of years, is almost negligible; being merely the subtraction of the births and deaths occurring in the areas concerned, from the yearly totals. Any changes in causes of mortality which might be due to environmental conditions would then be detectable, and the need for further research clearly established.<sup>3</sup>

The application of this method to the Sub-Economic Housing Estate in question, in conjunction with relevant extracts from the Medical Officer of Health's Annual Reports, yielded the data set out below. The specific 'Cause of Death' selected for scrutiny was pulmonary tuberculosis, and, at the time of the Survey, 1,489 of the houses were used as dwellings for Coloured families.

It is clear from the following tables that during the years under review, a proportionately larger number of persons in the racial group died from pulmonary tuberculosis on the Sub-economic housing estate, than in the rest of the City, and that this phenomenon was observable also in the 0-5 years Age Group, although the Infantile Mortality rates and Illegitimate Birth rates were lower (with the exception of 1942 and 1944), on the Estate. The general trend of the Infantile Mortality rate and of the Illegitimate Birth rate on the Estate would appear to be downward, in spite of the fact that the number of sub-tenants is known to have increased substantially after 1945, probably

TABLE I  
COMPARISON BETWEEN PERCENTAGES OF DEATHS ATTRIBUTED TO PULMONARY TUBERCULOSIS IN THE COLOURED POPULATION OF A CITY  
AND OF A SUB-ECONOMIC HOUSING ESTATE CONSISTING OF 1,500 DWELLINGS  
(DATA ARRANGED IN MUNICIPAL YEARS)

Year	% T.B. deaths in (a) 'City B'	(b) Estate	Increase % on Sub-Econ. Estate (Col. 2 minus 1)	Deaths from all causes on the Estate expressed as a % of all deaths in the City as a whole
1940	15.89	33.33	17.44 X	13.54
1941	5.83	21.01	15.18 X	23.11
1942	20.53	23.2	2.67	47.52
1943	25.11	32.08	6.97	52.85
1944	23.06	31.89	8.83	47.53
1945	26.87	32.69	5.82	43.34
1946	20.42	44.39	23.97 +	53.6
1947	27.24	38.59	11.35	56.57
1948	23.71	37.39	13.68	52.17

X The Estate was only completed in 1942.  
(a) City Excluding Sub-Economic Housing Estate.

+ Ex-Service men included.  
(b) Sub-Economic Housing Estate only.

1. *Rural and Urban Sociology*, Sorokin and Zimmerman.  
2. Cf. R. Pearl, *Medical Biometry and Statistics*. Pp. 57-58.

3. This argument would not, of course, be valid if the data included a tuberculosis settlement or other 'morbid' group specially selected for re-housing.

TABLE 2

COMPARISON BETWEEN INFANTILE MORTALITY RATES AND ILLEGITIMATE BIRTH RATES

Year	Infantile Mortality		Illegitimate Births	
	'City B'	Estate	'City B'	Estate
1940	152.3	125.8	34.73	29.8 X
1941	148.6	136.9	39.38	28.77 X
1942	199.2	202.8	35.55	32.22
1943	164.8	148.6	37.12	34.75
1944	204.7	135.9	33.04	33.33
1945	194.5	110.9	39.62	27.96
1946	155.4	130.7	37.1	27.36
1947	148.8	123.4	39.09	28.14
1948	153.1	121.8	34.13	24.37

but it is not possible, at this stage of the enquiry, to indicate the amount of monthly income per capita that was available after the cost of rent and transport to work had been met, for families in which deaths from pulmonary tuberculosis had occurred, as contrasted with those in which they did not. Nor can the extent to which the percentage of deaths in either group has been influenced by removals or ejection of families for non-payment of rent, be stated; nor is it suggested that all relevant factors have been investigated, but it is postulated that *it is evident from the foregoing that pulmonary tuberculosis is a proportionately more frequent cause of death on the estate and in favourable environmental conditions than in the general racial group, and that it would appear that this provisional conclusion warrants a national survey of the social and medical effects of State-aided Housing,*

TABLE 3

DATA REFERRING TO COLOURED POPULATION

	City A. (2)	Sub-economic housing estate	'City' B.	Increase % Sub-economic housing estate
Total Deaths Registered (during the nine years under review) ..	6,107	1,810	4,297	—
Deaths attributed to pulmonary tuberculosis ..	1,488	602	886	—
% of Deaths attributed to T.B. (i.e. Death Ratio for period) ..	24.37	33.26	20.62	12.64
Isolating Age Group 0-5 Years				
Total deaths registered ..	2,921	514	2,407	—
Deaths attributed to T.B. ..	196	58	138	—
% of deaths attributed to T.B. ..	6.71	11.28	5.74	5.54

(2) City A. Whole Racial Group.

causing increased density of population per house. (It is impossible to estimate the effect of the lower Illegitimate Birth rate on the Infantile Mortality rate, but it is a known fact that, in general, 'illegitimate' babies have a much higher mortality rate than legitimate. The beneficial effect of the excellent clinic facilities that have been available since May 1943 must also be taken into account).

## CONCLUSIONS

The general trend from 1942 onwards is towards a percentage increase of deaths due to pulmonary tuberculosis, as against deaths from other causes, on the Sub-economic housing estate, in spite of the fact that the Medical Officer of Health's Records take into consideration only the first-mentioned 'Cause of Death', which masks a considerable number of cases where pulmonary tuberculosis is a major contributing cause, e.g. a 'notified' tuberculous whose death is ascribed to asthma or heart failure as 'First Cause'. Moreover, the deaths of children under two years of age, who lived in a house with an active pulmonary tuberculous, and whose certified 'Cause of Death' was a respiratory disease, are not included in the above totals, although the majority of authorities would appear to consider that the probability is great that a large number of these children do, in fact, die from pulmonary tuberculosis.

It was indicated above that there is evidence to show that the conclusive factor with regard to health is nutrition,

including a detailed survey of conditions when the Rent System is:—(a) Economic; (b) Sub-Economic; (c) Differential (having a definite relation to per capita monthly income available for food). Such a survey is necessary to test the effects of the various systems on the disease rate: for investigation here reported shows that the same phenomena appear to be occurring in South Africa as have been noted in Britain.

## ABSTRACT

A. Prigot, L. T. Wright, M. A. Logan and F. R. Deluca. *Aureomycin in Ano-recto-genital Lymphogranuloma Venereum*. New York State J. of Medicine (1949): August 15, pp. 1900-1911.

Prigot and his associates report 49 cases of lymphogranuloma venereum and 13 cases of granuloma inguinale treated with aureomycin at their hospital. In these cases, they have never observed such eminently satisfactory results in so short a period. This paper confirms their previous observations and is a report on 14 additional cases of lymphogranuloma venereum and one of granuloma inguinale, the latter especially chosen because of its unusual rectal manifestations. It also includes a follow-up report on 12 of 35 originally reported cases of lymphogranuloma venereum and 10 of 12 cases of granuloma inguinale, all of which were treated with aureomycin. The drug was administered by the oral, intravenous and intramuscular routes. Effective blood levels were obtained if proper dosage was used, regardless of the route. Aureomycin is the treatment of choice for granuloma inguinale and for the strains of lymphogranuloma venereum with which the authors had to deal.

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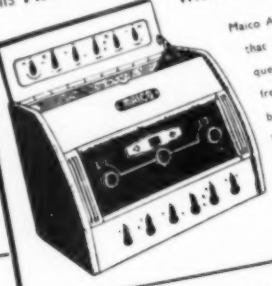


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# South African Medical Journal

## Suid-Afrikaanse Tydskrif vir Geneeskunde

### VAN DIE REDAKSIE

#### MENS- EN VARKGRIEP

Varkgriep was blykbaar onbekend voor die groot mensgriep-pandemie van 1918 en daar word gemeen dat die mensgriepvirus homself destyds aangepas het by en hom gevestig het in varke. In 'n reeks ondersoeke wat in die dertiger jare gedoen is deur dr. R. E. Shope, destyds aan die Rockefellerstiging verbonde, is daar aangetoon dat die varklongwurm die draer is van die virus van varkgriep en dat dit die virus oordra deur middel van sy eiers wat gedurende of onmiddellik na 'n aanval van varkgriep in die longe van varke gelê word. Hierdie besmette eiers word deur erdwurms ingesluk, wat op hulle beurt deur varke geëet word. Die eiers word in die ingewande van die vark vrygestel en trek na die longe waar hulle in volwasse longwurms ontwikkel.

Gedurende hierdie tydperk, wat van 'n maand tot drie jaar kan duur, is die virus in 'n bedekte vorm aanwesig en openbaar hy homself slegs wanneer 'n vark wat vir die siekte vatbaar is en hierdie longwurms huisves, onderwerp word aan 'n stimulus wat in gewone omstandighede taamlik onskadelik sal wees, d.i. 'n skielike weersverandering. Symptomatiese varkgriep kom voor wanneer 'n sekondêre bakteriële mikroorganisme, die wydverspreide maar gewoonlik onskadelike *Haemophilus influenzae suis* saam met die latente virusbesmetting aanwesig is en skielike klimaatsveranderinge intree, soos in die herfs gebeur. Indien die virus en die bakteriële organisme wyd versprei is onder die varke van 'n streek, veroorsaak dit die trefende skouspel van hele troppe varke wat op verskillende plase feitlik gelyktydig na 'n skielike koue of reëniger tydperk deur symptomatiese varkgriep aangetas word.

Die epizootologie van varkgriep word baie beter verstaan as die epidemiologie van mensgriep. Dit is byvoorbeeld heeltemal duidelik waar die tussenepidemiese opgaarplekke van die mensgriepvirus bestaan nie. Daar bestaan op die oomblik geen rede om aan te neem dat 'n parasiet soos dié wat as helmintiese opgaarplek by varkgriep optree, die mens aantast nie. Die ooreenkoms tussen sekere vorms van die varkgriepvirus met dié van die mensgriepvirus is egter so groot dat daar 'n dringende behoefte is aan vergelykende studies van hierdie twee virusse ten einde lig te werp op die griepprobleem as 'n geheel. Dit is byvoorbeeld bekend dat varke vatbaar is vir vorms van die mensgriepvirus en dit is moontlik dat hulle 'n rol mag speel in die epidemiologie van mensgriep.

Ten einde opheldering van die hele probleem aan te moedig, het die XIVde Internasionale Veerarkongres wat in Augustus 1949 in Londen vergader het, 'n besluit aangeneem waarin die Wêreld-gesondheidsorganisasie versoek word om 'n vergelykende studie van mens- en varkgriepvirusse by sy Wêreld-griepsentrum in Londen te onder-

### EDITORIAL

#### HUMAN AND SWINE INFLUENZA

Swine influenza was apparently unknown before the great pandemic of human influenza in 1918, and it is believed that the human virus became adapted and fixed in swine at that time. In a series of studies in the 1930's by Dr. R. E. Shope, at that time with the Rockefeller Foundation, it was shown that the swine lungworm is the carrier of the swine-influenza virus and transmits the virus through ova, which happen to be laid in the lungs of pigs during or immediately after an attack of swine influenza. These infected ova are swallowed by earthworms, which in turn are eaten by pigs. The ova are liberated in the pigs' intestine and migrate to the lungs where they develop into adult lungworms.

During all this time, which can last from one month to three years, the virus is present in a masked form and reveals itself only when a susceptible pig harbouring these infected lungworms is subjected to what would ordinarily be a fairly innocuous stimulus, e.g. a sudden change in weather. Symptomatic swine influenza occurs when, along with the latent virus infection, a secondary bacterial micro-organism, the widespread but usually harmless *Haemophilus influenzae suis*, is present, and sudden climatic changes intervene, such as occur in the autumn. The virus and bacterial organism being widely seeded in pigs in a locality causes the striking picture of whole herds of swine in different farms being almost simultaneously affected with symptomatic swine influenza after a sudden cold or rainy spell.

The epizootology of swine influenza is much better understood than is the epidemiology of human influenza. For example, it is not at all clear where the inter-epidemic reservoirs of the human-influenza virus exist. There are at present no grounds for drawing an analogy between the helminthic reservoir as found in swine influenza and a similar parasite affecting man. The similarities of certain strains of swine-influenza virus with those of human-influenza virus are so great, however, that comparative studies of these two viruses are strongly indicated for the purpose of shedding light on the influenza problem as a whole. It is known, e.g. that swine are susceptible to human-influenza strains of virus, and it is possible that they may play some role in the epidemiology of human influenza.

In order to stimulate the clarification of this entire problem, the XIVth International Congress, which met in London in August 1949, passed a resolution requesting the

neem. Dr. C. H. Andrewes, onder wie se toesig die Wêreld-griepsentrum staan, het volmondig in die versoek toegestem en reëlins is getref om verskillende vorms van die varkgriepvirus wat in verskillende dele van die wêreld geïsoleer is aan dr. Andrewes voor te lê. Aangesien daar verskeie griepagtige besmettings by varke voorkom, sal die afskeiding in groepe van die verskillende verwekkers wat by hierdie siektes betrokke is, plaasvind by die veeartsenkundige viruslaboratorium van die U.S. Public Health Service te Montgomery, Alabama, en in professor W. I. B. Beveridge se laboratorium by die Universiteit Cambridge. Na afskeiding in groepe om te verseker dat die varkgriepvirus werklik daarby betrokke is, sal die virusvorms aan die Wêreld-griepsentrum vir verdere ondersoek voorgelê word. Die afskeidingsprosedure sal ook die geleentheid bied om groter duidelikheid oor die etiologie te verkry van die verskillende griepagtige varksiektes waarvan die belangrikste 'Ferkelgriep' is—die siekte wat groot verliese aan varke op die Europese vasteland veroorsaak.

World Health Organization to undertake a comparative study of human- and swine-influenza virus at its World Influenza Centre in London. Dr. C. H. Andrewes, in charge of the World Influenza Centre, agreed wholeheartedly to the request, and arrangements have been made to submit strains of swine-influenza virus isolated in various parts of the world to Dr. Andrewes. Since there are several influenza-like infections in pigs, screening of the various agents involved in these diseases will be done at the U.S. Public Health Service's Veterinary Virus Laboratory in Montgomery, Alabama, and in Professor W. I. B. Beveridge's laboratory at Cambridge University. After screening to ensure that swine-influenza virus is actually involved, the strains will be submitted to the World Influenza Centre for further study. The screening procedure will also give an opportunity to define more clearly the etiology of different influenza-like diseases in swine, the most important of which is 'Ferkelgriep', a cause of great losses in pigs on the European continent.

## CHEMICAL SYMPATHECTOMY

### THE USE OF AQUEOUS SOLUTION OF PHENOL IN SYMPATHETIC BLOCK

SAMUEL SKAPINKER, M.B., B.Ch. (RAND.), F.R.C.S. (EDIN.), F.I.C.S.

*Baragwanath Hospital and the Department of Surgery, University of Witwatersrand, Johannesburg*

The object of this paper is to bring to the notice of the profession an extremely useful procedure not widely known in this country. This method was described by Haxton in May 1949,<sup>2</sup> and we have been using it at Baragwanath Hospital since May 1948. Fortunately I had the opportunity of working with Mr. H. A. Haxton in Manchester and was taught the value of 'chemical' sympathectomy.

This method can be used in all patients, irrespective of their age or general condition. The majority can be treated as outpatients, and the procedure requires relatively little training.

In the last 20 years, the interruptions of the sympathetic nervous system for many and varied conditions have become much more frequent. Two main methods have been used, viz. operative interference and the injection of various chemical substances to cause a partial or temporary interruption of the sympathetic system. The operative methods are well known and, although they carry a low mortality, they have the disadvantage of a major operative procedure under an anaesthetic, usually resulting in discomfort and temporary disablement of the patient. Moreover, the elderly and the poor-risk patients, as well as those with systemic disease, e.g. diabetes, and people over the age of 60, are usually refused the benefit of a sympathetic interruption.

Alcohol in various strengths was used for injection, but was abandoned by most as it caused a very marked neuritis. It was mainly due to this that Oshner,<sup>1</sup> Levy and Moore,<sup>3</sup> Lindgren and Olivecrona<sup>4</sup> and others discarded this procedure. In the majority of cases the

neuritis due to alcohol clears up in about one month, but in about 10% of cases the neuritis persists for a much longer period.

In Haxton's series, the post-injectional complications of phenol were rare. The most noticeable was a mild hyperaesthesia along the genito-femoral nerve, which seldom persisted for longer than three weeks.

At Baragwanath Hospital we have used this procedure for 100 patients and in none have we had any ill effects. Few have complained of more than a transient mild hyperaesthesia.

#### METHOD

Most cases on which paravertebral phenol blocks have been done, were for conditions affecting the leg and the foot. Blocking the second lumbar sympathetic ganglion was sufficient for this.

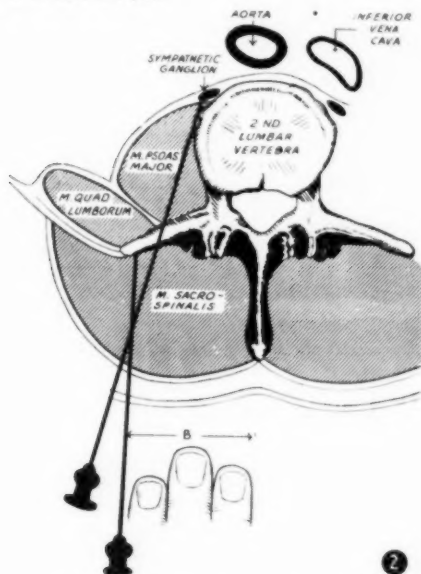
The patient is placed on his sound side, with his hips and knees flexed and his back bent (Fig. 1). After the skin has



been cleansed with Cetavlon, a wheal of 2% Novocain is raised three finger-breadths from the spine of the second lumbar vertebra. An 8 cm. Labat needle is then introduced vertically into the skin and inserted until the transverse process is felt. It is then moved so that it passes above or below the process

and is next inclined 45° away from the midline and introduced a further 3 cm. It is best not to attach the syringe to the needle until this stage has been reached (Fig. 2). One must watch for the welling up of blood from a lumbar vein or cerebrospinal fluid from a dural projection along the spinal nerve, that may be pierced accidentally. If blood or cerebrospinal fluid is found, the needle should be withdrawn and re-introduced. When this method is used in the thoracic region, the pleura may be pierced. This usually causes the patient to cough and when the syringe is applied, air can be withdrawn.

After ensuring that none of the abovementioned incidents has occurred, 3 c.c. of 2% Novocain is introduced, the patient is watched for two to three minutes and is then asked to move his toes. This is to make sure that the needle has not entered the dura. After this, 5 c.c. of 6% aqueous solution of phenol is injected. The solution should flow easily (one of the difficulties is that the needle may have pierced the periosteum of the body of the vertebra. When this happens, pressure has to be used to inject).



Very much the same procedure is used for the upper limb. The landmarks here are two finger-breadths from the spinous process of the second dorsal vertebra; otherwise the procedure is similar. After the phenol injection, the patient usually says that the affected limb begins to feel warm and shortly afterwards this can be felt by the observer.

**Preparation of the Solution.** The solution of phenol is prepared by making a saturated solution of phenol in distilled water and then filtering it. It is self-sterilizing and the solution at normal room temperature is 6%. In order to get a higher concentration, a heated solution has to be used. This method is used by Boyd *et al.*<sup>1</sup> in order to obtain a 10% solution. In our hands, the 6% solution has been adequate. Care must be taken to avoid contaminating the skin with the solution as it causes a superficial burn.

#### INDICATIONS

We have used this procedure in every case in which it is usual to perform a sympathectomy or where sympathetic interruption was indicated. The procedure is most

useful in patients with chronic leg ulcers due to old-standing thrombo-phlebitis and, although little reduction in the size of the limb occurred, the ulcer healed rapidly. This was also marked in varicose ulcers of the leg where it was combined with local treatment. Two cases of causalgia of the upper limb were rapidly cured by this method, the first requiring one block and the second two blocks at three-week intervals. Several cases of causalgia of the lower limb occurred, mainly due to crush injuries of soft tissues and fractures of the ankle and small bones of the foot. These were treated by phenol blocks with dramatic recoveries. Not more than one block was required in any of these.

We feel that limbs are definitely saved by this procedure in cases of compound fractures of the tibia where the blood supply is impaired. We are also certain that in some of these cases an operative sympathectomy would have resulted in a fatality, due to the poor condition of the patient.

In one case, the patient sustained a traumatic popliteal aneurysm due to a gunshot wound. A severe secondary haemorrhage occurred and ligation of the popliteal artery had to be performed. Twelve hours later, when we were requested to perform a phenol block, the blood supply of the limb was very precarious. The result was dramatic and the patient to-day is walking around with a useful limb. Superficial gangrene of his terminal phalanges did occur, but separated rapidly.

In numerous cases of arteriosclerotic gangrene, an improvement was obtained, especially when the gangrene was confined to the toes. In many of these cases, surgery is not undertaken because of the age of the patient. However, they stand chemical sympathectomy well. By this procedure we were also able successfully to attempt amputations at a lower level. In many cases which would have required an above-knee amputation, we were able to achieve a successful below-knee stump.

One case sustained a badly comminuted fracture of the lower third of his tibia. The limb was badly atrophied and wasted due to poliomyelitis and, although severely compounded, the skin healed and the fracture united satisfactorily. We think that we definitely shortened this patient's convalescence by the use of a phenol block.

We have also used this procedure in Buerger's disease with satisfactory results, but prefer to do a lumbar sympathectomy as we are dealing with younger patients in good condition.

**Intractable Pain.** Three cases of aortic aneurysm with very severe pain were referred for phenol block. One was in the thoracic region and two were in the abdomen. All three had marked erosion of the bodies of the vertebra. A bilateral phenol block of the affected ganglia was performed, with relief of the pain in the thoracic aneurysm and one of the cases of the abdominal aneurysm. The third case was not improved.

**Raynaud's Phenomena.** Only one case of Raynaud's disease is included in this series. He was a Bantu patient, aged 26 years, with a granuloma of the stomach and was also suffering from definite Raynaud's phenomena affecting the hands and feet. Blocks were done to the second dorsal and the second lumbar ganglia. After one

month the condition re-occurred in his hands, although his feet remained improved. A second block was done in the dorsal region, but unfortunately he left hospital and did not return.

#### DISCUSSION

The effects of phenol blocks usually last from three weeks to three months and sometimes a permanent cure is obtained. However, in the majority of our cases, three months is sufficient to tide a patient over his vascular crises. This is especially so in ulcers of the legs. However, in those cases where a longer-lasting effect is required, a repeat lumbar block can safely be done. In two cases of Buerger's disease, a lumbar sympathectomy was performed after lumbar block, and in these the sympathetic chain was found to be fibrotic. On section, it was found that the ganglion cells had lost their nuclei and were degenerate. No evidence of slough or necrosis was noticed in the psoas muscle or the neighbouring vessels.

We have had no complications in our series although others have mentioned a case of transient paralysis with weakness lasting a few weeks. A few of our patients complained of a neuritis, but this has been mild and has subsided in one week or less.

We have not used the 10% solution advocated by Boyd, but have found the 6% solution adequate.

This procedure is not advanced to displace operative methods of sympathectomy, but only as a useful addition to the armamentarium of sympathetic surgery, where a long-lasting temporary effect is required.

#### SUMMARY

1. A method of lumbar block with 6% phenol is described.
2. A brief discussion on the method and its indications is given.

I must thank Dr. C. Kisner for the illustrations.

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## DERMATOMYOSITIS WITH VESICULAR AND BULLOUS LESIONS

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The skin lesions of dermatomyositis are known to be polymorphous, and the finding of vesicular and bullous eruptions, although unusual, may scarcely cause surprise. This is indeed so if such lesions are a transitory or minor manifestation of otherwise typical cases. But when their predominance is such as to cause confusion with other bullous diseases, their importance becomes considerable.

In two cases reported here, some such confusion did in fact occur. In the first patient, the dermatosis closely resembled the vesicular eruption seen in congenital or chronic porphyria. In the second, the skin lesions were indistinguishable from those of non-septicaemic acute pemphigus, and could readily have been mistaken for those of the so-called Stevens-Johnson syndrome. The third patient received the benefit of our previous experience, and the correct diagnosis was made.

#### CASE I

A 40-year-old Bantu female from Vrede, O.F.S., had suffered from dermatomyositis for three years. She was

observed, through the courtesy of Dr. Evelyn Popper, in the Non-European Hospital, Johannesburg.

The patient complained of generalized pains, and a stiffness and weakness of the muscles of three years' duration. Her illness started with cramps in the limb muscles, accompanied by swelling of the face and extremities which subsided a month later. She said that the face and feet were still apt to be swollen in the mornings, subsiding again each afternoon. Within a year of the onset of symptoms her knees began to feel stiff. The hips then began to stiffen and in the second year of the illness the joints of the upper limbs were likewise affected. Latterly the limbs were free from pain, but she still suffered from headache and pain in the chest on coughing. She tired easily and was at one time too weak to wash herself. She had lost a great deal of weight.

For three years she had noticed increasing pigmentation and hairiness of the skin, with a ready peeling on exposure to sunlight and a lessened resistance to trauma



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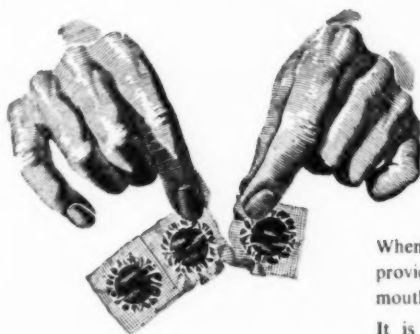


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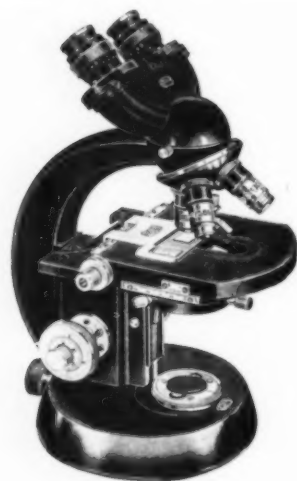
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in the skin of the extremities. Intensely pruritic blisters containing a watery fluid appeared on the limbs, trunk and scalp. Blood blisters had also been observed. On the scalp the hair had become sparse, thin and straight.

She had never had any abdominal pain or gastrointestinal disturbances. Her urine had never been an abnormal colour and no urinary symptoms had occurred. Her periods were normal and regular. She had had seven pregnancies and no miscarriages; five children were alive, and the youngest was born just before the present illness commenced. No members of her family were affected with an illness like hers.

**Examination.** The patient looked haggard and miserable, and weighed 100 lb. Her posture, determined by muscle contractures, can be seen in Fig. 1.

**Skin.** The back and sides of the scalp were scaly, and the scalp hair was thin, straight and sparse. Eyebrow, eyelash, axillary and pubic hairs were normal. The side-whisker areas of the cheeks, the extensor surfaces of the forearms, and the lower limbs from a point four finger-breadths below the anterior superior iliac spines, showed an obvious hypertrichosis.

The general skin texture was fine and silky. It was supple everywhere with no tendency to ichthyosis, sclerosis or callus formation. There seemed to be little subcutaneous fat, and one was able to feel the sclerotic muscles with ease. We were reminded of a eunuchoid skin texture. No abnormal elasticity was noted.

Skin pigmentation showed a general increase over the cheeks, pressure points (iliac crests, trochanters, ischial tuberosities) and the limbs, particularly over the indurated muscles and the parts exposed to the sun. A marked xanthosis cutis (carotenaemia) was present. The yellow colour was noticeable in the palms, soles, nails, popliteal fossae, umbilical and inguinal regions. The blood serum contained five times the amount of carotene of a random control specimen. The abnormal colour of the skin gradually faded in hospital. This decrease ran parallel with the shrinkage in size of the liver (*vide infra*). The patient had eaten pumpkin at home but it was not her main article of diet.

Depressed scars 1-10 mm. in size, varying in colour between slight depigmentation and a dead white sclerosis, were distributed as follows: over the upper sternum, the scapulae, the deltoid muscles, the backs and sides of the arms, extensor aspects of forearms, and to a lesser extent over the dorsa of the hands and the knuckles, the lumbar region and middle of the back, extending upward to meet the deltoid and scapular patches, over the tendinous parts of the oblique abdominal muscles lateral to the rectus sheath, and extending up along the outer sides of the breasts to the anterior parts of the deltoid muscles, over the thighs (outer aspects especially), the legs and dorsa of the feet and toes. At a rough estimate, more than a thousand such spots were present. In places they were confluent, producing a reticulated atrophy. Surrounding each spot there was an increase in pigment.

The patient claimed that all these scars were the residua of vesicles, and from our observation we could trace all stages between the vesicle and the final atrophic spot. Small numbers of recent vesicles, 5 mm. across, with

thin dome-shaped roofs and clear yellow watery contents were noted on the feet. These were seen to rupture and crust, followed by a centrifugal exfoliation proceeding to a diameter of 1-2 cm., leaving a hyper-pigmented zone around the site of the vesicle with a small crust persisting in the centre. This crust would eventually separate, leaving a small depigmented atrophic spot with surrounding hyper-pigmentation.

There was no visible erythema or telangiectasia.

Superficial flat purpuric stains were noted on the extensor surfaces of the forearms, backs of hands and knuckles, in small numbers on the palms, two in the finger nail beds, several over the thighs, legs and dorsa of the feet, and a few round the edges of the soles with one large spot in the centre of the right sole. These spots gradually underwent exfoliation. In addition there were several blood crusts on the thighs, and a striate purpura with crusting (scratch marks) over the back.

Sweating was noted from axillae and palms.

An attack of herpes zoster (7-8 right thoracic) complicated her stay in hospital.

**Muscles.** Her muscular system showed a combination of atrophy and fibrosis with contracture. The feet could not be dorsiflexed or the knees, hips, wrists and elbows fully extended. Several of the proximal and distal interphalangeal joints showed flexion contractures. Flexion of the neck was limited and the arms could not be actively abducted. The limitation of movement was due to a woody fibrous contracture of muscles, best felt in the following sites: lateral part of gastrocnemius, anterior compartment of legs, vastus lateralis, biceps femoris, sacrospinalis, quadratus lumborum, semispinalis capitis, trapezius, latissimus dorsi, pectoralis major, anterior belly of digastric, supraspinatus, anterior portion of deltoid, biceps and triceps, forearm extensor group and to a lesser extent in the flexors. Atrophy was obvious in the temporalis and posterior parts of the masseter, the posterior part of the deltoid, the infraspinatus and the vastus medialis. There was no affection of the ocular, oral or laryngeal muscles. Reaction of degeneration was not noted in the limb muscles.

**Nervous System and Eyes.** No abnormalities were detected in the nervous system. The muscles showed no fibrillation. The patient did not appear to be mentally abnormal. There was enophthalmos, but otherwise the eyes were normal.

**Heart.** This was clinically normal but for a loud blowing apical systolic murmur. The blood pressure was 120/80 mm. Hg. Chest skiagrams showed a possible left auricular enlargement with a fulness in the pulmonary conus. Screening showed a doubtful left auricular enlargement, but some enlargement of both ventricles was described. Electrocardiographic studies (Dr. A. J. Brink) showed a fairly slow rate (65/minute) with sinus arrhythmia; P-Q interval not prolonged (0.12 second); QRS interval not widened, Q-T<sub>c</sub> within normal limits (0.40 second); S-T segments in the standard and unipolar limb leads showed no abnormal deviation, but in the precordial leads there was upward bowing in leads V1 to V4. The T was negative in leads II and III, biphasic in lead aVF and inverted in leads V1 to V4. Marked left

axis deviation was present due to the horizontal position of the heart as shown in the unipolar limb leads. Dr. Brink concluded that there was no electrocardiographic evidence of hypertrophy of either ventricle. The heart was in a horizontal position, and the T-wave changes were to be regarded as a normal variant, possibly transitory, which one might occasionally see in the Bantu in the absence of other evidence of right ventricular disease.

**Liver.** The liver was enlarged four fingerbreadths below the right costal margin. After four weeks in hospital it reverted to normal size. Dr. T. Gillman considered this to be evidence enough of fatty infiltration due to malnutrition, and declined to perform a liver biopsy at this stage. There was no radiological abnormality in the liver area, and the diaphragm moved freely on respiration. While the liver enlargement was still present the following investigations were done: prothrombin, 75%; icterus index, 7; alkaline phosphatase, 7.7 units; van den Bergh, negative; bilirubin, less than 0.5 mg. per 100 ml. direct, total less than 0.5 mg. per 100 ml.; thymol turbidity, 4.5 units; thymol flocculation, ++; Takata-Ara (Ucko), ++; serum albumin, 3.5 gm. per 100 ml.; serum globulin, 4.6 gm. per 100 ml.

**Other Organs.** No abnormalities.

**Skiagrams.** Skiagrams of the entire body showed no ectopic calcification or ossification. Osteoporsis was observed in the distal ends of femora, tibiae and fibulae, radii and ulnae, and the bones of the hands.

**Other Laboratory Investigations.** Urinary creatine excretion (inter-menstrual) 470 mg./24 hours; preformed creatinine 530 mg./24 hours. Blood cholesterol 170 mg. per 100 ml. The urine contained no abnormal constitu-

ents; no porphyrin or porphobilinogen; culture sterile. The stools contained no parasites or pus cells.

Hb. 12.4 gm. per 100 ml.; erythrocytes 4,600,000 per c.mm.; C.I. 0.86; leucocytes 6,300 per c.mm.; neutrophils 58%, monocytes 2%, eosinophils 12.5%; red cells normal in appearance; E.S.R. 17 mm./hour.

**Histology** (South African Institute for Medical Research): *Triceps muscle*—the fibres showed swelling and fragmentation with marked loss of striation in some fibres. Round the smaller vessels were foci of lymphocytic infiltration.

*Skin from back of arm*—slight acanthosis and hyperkeratosis. Corium showed foci of round cell infiltration with sub-epidermal accumulation of pigment.

## CASE 2

A 25-year-old Bantu farm labourer from the Brits District, Transvaal, developed dermatomyositis which was fatal 3½ weeks after its onset. He was observed by us in Dr. H. W. Snyman's clinic at the Pretoria General Hospital for the last 10 days of his life.

For the first week of his illness the patient felt unwell but did not stop working. He then developed rigors, and the muscles of his upper and lower limbs became extremely painful, stiff and weak. He complained of lameness in all the large joints. Three days later he developed vesicles in the elbow and knee flexures which increased in size. The roofs of these were soon shed, leaving large tender raw surfaces. Two days before he was sent to hospital more bullae appeared. These were distributed in the axillae, inguinal regions, on the sides of

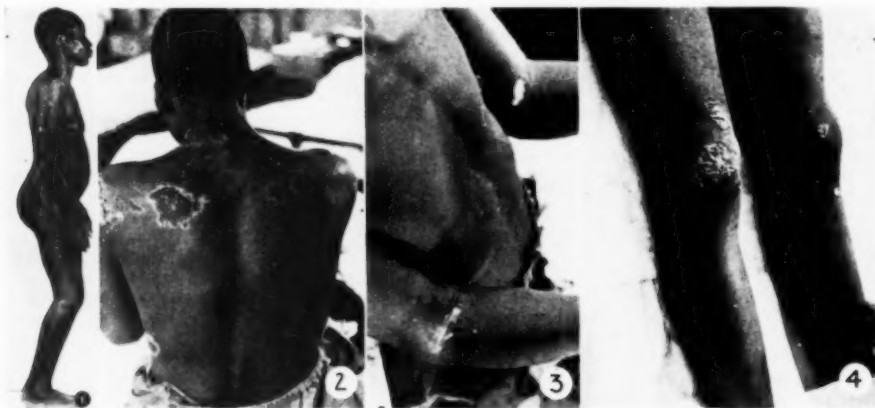


Fig. 1 (Case 1). Chronic dermatomyositis. The elbows, hips and knees cannot be extended further. Regional increase of pigmentation and widespread macular depigmentation can be noted. The latter is a sequel of bulla formation.

Fig. 2 (Case 2). Acute dermatomyositis. Crusted and eroded residua of bullae mainly on pressure points. The patient was placed in position for the photograph. He could not sit up on his own.

Fig. 3 (Case 2). White erosions in elbow flexures as a sequel to bullae. Gross oedema over muscle bellies in forearm.

Fig. 4 (Case 2). Broad flaccid bullae over right knee. Scattered bullae and crusts elsewhere.

the neck and over the back. On the day before admission he said that his body had started to swell. No other facts of importance were elicited in the history.

Figs. 2-4 illustrate some features of the skin eruption as seen on admission.

**Skin.** The primary cutaneous lesion was a flaccid bulla (0.5 cm. across, and larger), with serous, seropurulent or slightly haemorrhagic contents. The roof of the bulla comprised the entire pigmented thickness of the epidermis, and the base was white or pink. The roof would slide off with ease. The unpigmented floor thus revealed contrasted sharply with the dark surrounding skin, and looked much like recent second degree burns as they appear in natives. The intervening skin did not show Nikolsky's phenomenon.

Bullae of this type and their ulcerated and crusted sequelae were distributed in the following way. Their initial distribution was in *flexures* and over *pressure points*—on the temples extending out from the outer canthi (pressure on the pillow), on the edge of the helices of the ears, round the back and sides of the neck, over the scapulae (Fig. 2) and the posterior aspects of the deltoids, in striate configuration along the axis of the ribs (this developed after the photographs were taken), in axillae and inguinal folds, in elbow flexures (Fig. 3), extensively over the sacral region, over the iliac crests in a zosteriform arrangement, over the greater trochanters, in the popliteal fossae and round the patellae (Fig. 4).

The next pattern of distribution of bullae and erosions was in relation to *orifices*. The lower lip, the nasolabial folds and the scrotum were thus affected. The peri-anal and external genital skin were otherwise uninvolved. Apart from the erosion extending to the temples from both outer canthi, the eyes showed no abnormality. Scattered irregularly over the trunk and proximal portions of the extremities were additional bullae which preserved their roofs longer than those on pressure points and flexures. There were also several raised reddish-purple nummular patches, about 1 cm. across, on the dorsa of the hands and on the scrotum. Bullae continued to erupt throughout the illness.

A firm and extremely tender swelling of the extremities was noted, which progressed in hospital. Before death the limbs showed a tense woody oedema. The face was only slightly puffy.

Four days before the patient's death he complained of difficulty in swallowing. Food was regurgitated through the nose and his speech became nasal. On examination the pharynx was found to be injected and an ulcer was present on the posterior pharyngeal wall. Culture of swabs from the throat showed only Friedlander's bacillus. No diphtheria bacilli were detected.

**Muscles.** There was severe pain on active and passive movements of the limbs and on pressure over limb muscles. He could not sit up unaided on admission. As the illness progressed he was able to move himself still less. He was ultimately unable to raise his head from the pillow or to lift his limbs off the bed. Aided by his immobility, the erosions on pressure points rapidly extended. The pharyngeal muscles showed the weakness mentioned above, with associated weakness of the palatal

reflex. Articulation and phonation were unaffected, but his speech was weak and tremulous.

**Further Clinical Findings.** There was a continuous pyrexia (100-102°F) and tachycardia (120/minute) throughout. On admission, the blood pressure was 110/80 mm. Hg. The central nervous system was intact. No other abnormalities were found on examination apart from a general enlargement of the superficial lymph glands. Throughout the illness the patient was mentally clear. A day before his death the patient had a severe epistaxis and developed a loose cough with moist râles at both lung bases. He died without developing further symptoms or signs. Penicillin injections had been given throughout the illness, but the course of the disease did not appear to have been influenced by them.

**Laboratory Investigations.** On admission: E.S.R. 18 mm. 1st hour: Hb. 108%; erythrocytes 5,700,000 per c.mm., mean diameter 7.5  $\mu$ ; leukocytes 5,800 per c.mm.; polymorphs 44%, lymphocytes 22%, monocytes 34%. Platelets normal. Van den Bergh reaction, negative. The urine was chemically and bacteriologically normal. Porphyrins were not detected. Creatine output was not studied. Cultures from the skin ulcerations showed *Staphylococcus aureus* and *albus*. Five days after admission: Hb. 108%; erythrocytes 5,710,000 per c.mm., mean diameter 6.9  $\mu$ ; leukocytes 16,000 per c.mm.; polymorphs 81%, lymphocytes 11%, monocytes 8%. Paul-Bunnell reaction, negative. Serum albumin 4.05 gm. per 100 ml., serum globulin 2.14 gm. per 100 ml.

**Autopsy.** Abstract of report by Prof. J. Barnetson (Institute of Pathology, Pretoria):

In addition to the skin changes and a general acute non-suppurative adenitis of the superficial lymph glands, the only positive finding was a suppurative bronchitis and a widespread bronchopneumonia. Apart from the lungs all the internal organs were macroscopically normal. The mediastinal lymph glands were enlarged; the mesenteric glands were normal. On microscopic examination of the liver, spleen, kidneys, thyroid and pituitary, nothing abnormal was seen. Microscopic studies of two specimens of skeletal muscle from the rectus abdominis showed patchy degeneration, in places of marked degree, with loss of striations of the fibres, and necrosis of the vessel walls with slight perivascular lymphocytic and eosinophil infiltration. There were other areas showing similar cell infiltration without the vascular changes.

#### CASE 3

A 20-year-old Bantu male from Pretoria was admitted to Dr. H. W. Snyman's clinic at the Pretoria General Hospital.

He complained of pain, tiredness and a weak heavy feeling in the neck, back, arms and legs for the previous three weeks. His arms, neck and face became swollen, and a single blister appeared on the right side of the neck two weeks after the illness began. The blister had rapidly enlarged and broken down, discharging some purulent fluid. The mucocutaneous junction of the lips became red, swollen and fissured before admission. At the same time swallowing became progressively more difficult and painful, and fluids were regurgitated through the nose.

The following abnormalities were noted. He maintained a position of general flexion in bed. The affected muscles showed a tender, rubbery swelling and a peculiar

elastic and painful resistance to extension. The muscle groups so involved corresponded to those noted in Case 1. The eyes, palate, tongue and laryngeal muscles could be moved voluntarily, but not without pain, and their actions could not be steadily sustained. The patient was too weak to turn in bed or feed himself.

Oedema of the face, arms and neck was observed. On the sides of the neck it was of a springy, jelly-like consistency.

In the lower part of the right posterior triangle of the neck there was an oval area of hypopigmented skin, 8 cm.  $\times$  3 cm., with its long axis lying horizontally. This represented the remains of a single large bulla. A few small crusts were still adherent within this area and repigmentation had begun in places. A hypopigmented patch 2 cm. across was present at the outer end of the right scapular spine. A few hyperpigmented scales persisted on the patch and there was no evidence in the history or on examination that a bulla had preceded the loss of the pigmented epidermis. The lip margins were swollen and fissured, and the buccal and pharyngeal mucosae were swollen and congested. The papillae of the tongue were red and prominent, due to a superficial marginal 'stripping'. There was no ulceration in the buccal cavity, and no other mucous surfaces showed any abnormalities.

Apart from these findings, the history and examination revealed no other facts of importance.

The patient's temperature was continuously raised (99°-101°F). A monocytosis was present in the blood. Creatine output was 184 mg. in a 24-hour specimen. Electrocardiograms showed no abnormality apart from a tachycardia. Further investigations are being conducted on the case, but we are reporting the findings at an early stage to illustrate two main points. Firstly, the case represents a transition between Case 2 and other more typical examples of dermatomyositis; secondly, it shows that epidermal atrophy may result either from sequestration of a bulla roof or a pellagra-like epidermal scaling over pressure areas and convexities.

#### DISCUSSION

Vesicles and bullae were not seen in any of O'Leary and Waisman's series of 40 cases of dermatomyositis<sup>11</sup>. However, a search of the available literature reveals a number of instances in which these lesions were discovered.

In 1903 Christen<sup>8</sup> in Switzerland described a pemphigus-like eruption in a case of dermatomyositis. Seier's case, reported by Keil<sup>9</sup>, showed a single episode of a vesicobullous eruption on knees and buttocks with a purulent conjunctivitis. This was regarded as an attack of erythema multiforme. Stuckey<sup>12</sup> reported scattered vesicles as a transient development in an otherwise typical case, and Jager and Grossman<sup>7</sup> noted vesicular lesions on the fingers and dorsal aspects of the hands. Holmes<sup>6</sup> mentions the Stevens-Johnson syndrome in the differential diagnosis of the skin lesions of dermatomyositis. Several authors also allude to the resemblance between the end results of the skin lesions and the residua of epidermolysis bullosa. Freudenthal<sup>1</sup> stressed the presence of oedema

between epidermis and corium; this could presumably lead to bulla formation if sufficiently developed. Schuermann<sup>10</sup> of Würzburg has briefly emphasized one of the peculiarities of vesico-bullous exanthemata in dermatomyositis which is confirmed in our second case, viz. a tendency to a striate arrangement of lesions in the axis of the lines of cleavage. Schuermann also stresses their rarity, but he mentions in passing that these lesions may be developed to a variable but possibly great extent. This 'zosteriform' arrangement could presumably lead to confusion with disseminated or even generalized zoster.

Trophic ulcers and decubitus ulcers are commonly reported in dermatomyositis. Our second case shows that one cannot regard these ulcers as due purely to pressure in a debilitated individual with muscle weakness. In him they readily occurred on the neck and temples through contact with the pillow. When bullae occur in dermatomyositis, it would appear that the convexities are particularly liable to develop them. With an atrophic epidermis bullae would be short-lived or absent, and the results would then be called bed sores. Flexural ulcers clinically indistinguishable from early erosions over pressure points are also known in dermatomyositis. Karelitz and Welt's case<sup>8</sup> showed axillary and inguinal lesions of this type, as does our second case. One of us recently saw a patient with typical dermatomyositis in which an analogous process was present. In this patient erythematous and purpuric plaques were present in both elbow flexures. These seemed to spell recent unsuccessful venipunctures, but this was not so. The lesions corresponded in principle to the ulcerated bullae illustrated in Fig. 3.

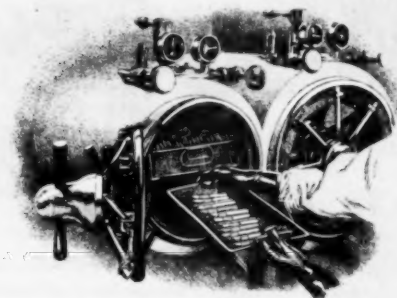
In 1899 Oppenheim,<sup>13</sup> the Berlin neurologist, emphasized the occurrence of superficial ulceration of mucous membranes in dermatomyositis and used the expression 'dermatomucosomyositis' for this process. He argued that there was often observed to be a dermatitis overlying the affected muscles of the trunk and limbs. As the eye, mouth and throat muscles were known to be involved in dermatomyositis, he considered it not surprising that the overlying mucous membranes became affected. It was however evident to him, in his paper of 1903,<sup>13</sup> that all the orifices could show erosions regardless of the extent to which the underlying muscles (if any) were affected. Thus the lips, cheeks, nasal mucosa, aditus laryngis and external ear could exhibit superficial ulcerations. On a mucous surface a bulla is soon ruptured, and by analogy with other diseases we may suppose that these lesions are an equivalent of bullae on the skin.

Several other aspects of dermatomyositis deserve mention.

If the chronic case of dermatomyositis has any relation to scleroderma, it would appear to resemble that group in which a familial dermatosis with myopathy of the head and limbs is seen. This group among others contains the so-called Werner's syndrome, recently reported by one of us in a South African family in which bullae and ulceration over pressure points (malleoli, tendo achillis) were described<sup>3</sup>. Sir Thomas Lewis' case<sup>10</sup> should probably be placed near this group.

It has several times been suggested that resemblances





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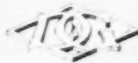
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are to be observed between dermatomyositis and porphyria.<sup>1, 10</sup> Muscular weakness, swelling of the face and pigmentary disturbances are seen in both. In other particulars, the well-known preference of the skin changes in dermatomyositis for the exposed parts reminds one of porphyric dermatoses. The dermatoses themselves also show close resemblances towards each other in matters of detail. The resemblance of vesiculo-bullous lesions in dermatomyositis to those of porphyria (hydra aestivale; epidermolysis bullosa), especially in the chronic case, is noteworthy. In our first case the widespread affection of the covered parts of the body seemed to contradict this principle, but we observe that Siemens<sup>17</sup> has alluded to the possibility that epidermolysis bullosa, when complicated by pruritus, may present a widespread eruption on the trunk. Dermatitis herpetiformis may thus be simulated. Hypertrichosis is another symptom common to dermatomyositis<sup>14</sup> and porphyria. Hypertrichosis in porphyria has recently been discussed by one of us<sup>2</sup> and our findings are directly applicable to Case 1 of dermatomyositis in the present paper. Purpura of the involved skin is found in dermatomyositis and chronic porphyria alike.

Another group of affinities exhibited in dermatomyositis is seen in its importance as a forerunner or concomitant of malignant disease. Malignant tumours of reticulo-endothelial system, brain, breast, ovary, bronchus and stomach have been noted with dermatomyositis more often than can be ascribed to chance. Dostrovsky and Sagher<sup>1</sup> have devoted a paper to this subject, and Schuermann<sup>16</sup> has also noted the association. In this respect dermatomyositis has a meaning not unlike that attached to *parapsoriasis en plaques*, *acanthosis nigricans* and *poikiloderma atrophicans vascularis*. Richter<sup>15</sup> of Erlangen has recently described cases of malignant reticulo-endothelial diseases associated with non-septicaemic acute pemphigus. The dermatological picture in Richter's cases was very similar to that observed in our second patient. We may therefore say that the affinities of dermatomyositis with malignant disease hold good also in respect of the rare bullous eruptions which may occur in both conditions.

#### CONCLUSIONS

In acute and subacute dermatomyositis, bullae and their equivalents or sequelae may be observed on pressure points, flexures, orificial surfaces and mucosae. They may also be widely distributed over the trunk and limbs. Several diagnoses may be reasonably be entertained: dermatomucosomyositis, erythema multiforme (Hebra), the Stevens-Johnson syndrome, acute pemphigus and, possibly, generalized zoster. Without discussing the status and affinities of each of these, we wish merely to indicate that the diagnosis of Stevens-Johnson syndrome, so fashionable at present, is perhaps the most important one to avoid.

In chronic dermatomyositis, vesicles and their sequelae may be observed on parts exposed to light and trauma. The following diagnoses may be considered: hydra aestivale and epidermolysis bullosa with or without porphyria, and dermatitis herpetiformis. If one overlooks the fact that the atrophic spots are scars, and assumes

that the pigment obscures erythema and telangiectasia, the diagnosis of poikiloderma atrophicans vascularis may be preferred. We are not suggesting that any of these diagnoses would be wrong. On the contrary, these clinically intermediate cases with diverging affinities deepen one's appreciation of each diagnostic group.

#### SUMMARY

Three cases of dermatomyositis are described. In one the condition was rapidly fatal. A skin rash was present which was indistinguishable from pemphigus acutus. The condition could readily have been diagnosed as the Stevens-Johnson syndrome in error.

In another patient the disease was chronic. The dermatological findings were those of epidermolysis bullosa, and an associated hypertrichosis with pigmentation and muscle weakness made the diagnosis of chronic porphyria seem probable. Porphyrinuria was however not present.

The third patient showed some intermediate features.

Similar findings in the literature on dermatomyositis are reviewed and discussed.

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#### VERENIGINGSNUUS : ASSOCIATION NEWS

##### REPORT OF SUB-COMMITTEE ON POST-GRADUATE EDUCATION AND REGISTRATION.

Federal Council at its meeting in March 1950, had before it the report of its representatives who attended a Conference called by the S.A. Medical and Dental Council on 13 December 1949, on the subject of Post-Graduate Medical and Dental Education, Examination and Registration in the Union.

To comply with the request therein that a memorandum be submitted by the Medical Association of South Africa at the next conference, two representatives from each Province were elected to collect opinions of Branches in that Province, correlate them and submit their reports to myself for final correlation and report to Federal Council.

Based on the reports to hand, I submit the following:—

The subject laid before Branches was a very wide one. It is so wide that it was inevitable that individual Branches would approach the problem from differing angles. This is evident in the terms which resolutions from the Branches display. It becomes impossible to adequately correlate the resolutions for most of them are complicated, in that they incorporate many aspects of the problem in one resolution and involve conditions where one factor governs another.

In the first instance then only the broadest common denominators can be extracted. These can be enumerated as follows:—

(a) The whole subject is of very genuine interest to the profession and a solution of it is ardently sought.

(b) That specifically there exists (1) a demand for post-graduate tuition both of the refresher type and specialist instruction type, and (2) a demand for the provision of higher qualification of uniform character.

As a basis for discussion by Federal Council it might be of advantage to seek out the sense of the various resolutions and from such a dissection evolve a policy. Considered in this way there would emerge:—

*Relationship of Medical Council to Teaching and Examining Bodies:* Principal Davie in his paper gives as his view the urgent need for 'the formation of an Institution, jointly governed by the S.A. Medical Council and the Universities, which will determine the educational requirements for each and every speciality, inspect the examinations for these specialities, supervise the standard of training of the auxiliary medical services and generally take over on a statutory basis the services provided in Great Britain by the three Royal Colleges and a host of smaller organizations'.

The Executive of the S.A. Medical Council has by resolution declared its policy as follows:—

'The Council is not itself concerned to be a teaching or examining body, nor does it consider it desirable that it be represented officially on any college or body which may come into existence as a teaching or examining body for degrees or diplomas in medicine. Its relation to post-graduate medical education and to post-graduate diplomas granted by a properly constituted and recognized body would be exactly the same as its relation to under-graduate medical education and training and to primary registrable medical qualifications.'

In the light of this resolution of Medical Council, Principal Davie's suggestion does not seem feasible.

It is advisable, however, for the Medical Association to express approval of the resolution of the Executive of Medical Council and further to declare that it does not consider that the independence of universities should be encroached upon by the establishment of a statutory body.

The Conference by the S.A. Medical and Dental Council was called for consideration of post-graduate education, examination and registration in the Union. The subject is most easily examined under its three component parts, viz. education, examination and registration.

*Education:* Principal Davie states most emphatically 'that post-graduate teaching, as is to be undertaken in South Africa, should, for the present and probably for many years to come, be confined to our Medical Schools'.

There would be general support throughout the Medical Association for this opinion. The time for the establishment of an independent post-graduate institution is not yet. Another competitor for a share in the country's limited resources of finance, material and personnel is not advisable.

The report of the Committee of the British Medical Association on the training of the general practitioner, which is just to hand, recommends in paragraph 77 that 'organized post-graduate training should be directed from the universities so that all medical education shall possess a cultural background and general practice maintain a connection with the universities'.

To furnish the tuition required, our medical schools are faced with difficulties. Their problem has been accentuated by a number of factors. Amongst others are the following:—

(a) The rapid increase in the number of students presenting for under-graduate medical study.

(b) The growth of medical research in the Union.

(c) The demand for refresher courses.

(d) The demand for special post-graduate tuition.

The introduction of the legal requirements of an internship to be served after graduation but before registration by the S.A. Medical Council and the introduction by the S.A. Medical Council of a specialist register indicate direct State concern in medical education and involve the S.A. Medical Council in extended functions and responsibilities and must have implications in many directions not as yet fully recognized.

Previous overseas facilities satisfied many of the above needs, but difficulties of travel and the general world situation has focussed the demand on local institutions.

The pressure of these demands is taxing the resources of the Medical Schools in regard to accommodation, clinical material and personnel. Furthermore the character of university examinations is being moulded to meet present circumstances. Degrees are tending to lose their academic significance.

It is difficult for the Medical Association to detail suggestions for alleviating the difficulties now experienced by the Medical Schools. In broad issue the following recommendations can be considered:—

(a) The basic need is increased facilities—buildings, material and personnel. Increased Government financial assistance would enable the Medical Schools to expand their activities.

The medical schools are performing a State service and their difficulties have been increased by recent legislation. It will be legitimate accordingly for them to seek increased State aid.

The Association should lend all the support within its power to obtain this increased financial help.

(b) To correlate activities, to prevent unnecessary overlapping of special courses and to make the best use of clinical material, some sort of liaison should be established between the medical schools.

The suggestion has been made by Principal Raikes that a co-ordinating council of the various universities should be established. It is not envisaged that such a council would have statutory powers; it would be advisory only.

Such a council or committee could be established by mutual agreement between the medical schools. It might be possible through this liaison for arrangements to be made to utilize clinical material remote from individual universities, e.g. such material as exists at Bloemfontein and Port Elizabeth by seconding lecturers from medical schools. A team could be built up to organize a refresher course. Special lectures by senior men could supplement the basic course.

*Examination:* Principal Davie has stated *inter alia*:—'All universities, not least those in South Africa, have undertaken the training for professional qualifications at the direct or indirect request of the State. In doing so they have sacrificed some of their ideals for providing "education" for those seeking higher learning in order to meet the minimum requirements of the bodies of professional men who regulate the basis on which those training for their professions shall be admitted to it.'

'The universities can and do regard their training for their qualifying degree—the M.B., Ch.B.—as educative processes covering more than the minimum laid down by Medical Council'.

'Up to now the universities have battled stoutly to defend their independence in relation to the awarding of their higher degrees—the Mastership and the Doctorate. These awards, intended to serve as hallmarks of advances in higher learning and scholarship, are, however, in many cases now coming to be regarded as admission certificates, as tickets of entry to professional specialist status.'

It is generally accepted that Principal Davie has not overstated the position.

It would be a sad day if the universities failed in their battle to defend their independence in awarding their higher degrees, if these degrees became mere admission certificates and if the qualifying degree M.B., Ch.B. did not cover more than the minimum laid down by Medical Council.

The establishment of an independent examining body would seem to be the answer to the universities' dilemma.

Such a body would naturally accord to its examinations a standard that would conform to Medical Council requirements. The admission to them and the conduct of these examinations would fall within the purview of Medical Council inspection, etc., etc.

Teaching would remain with the universities; there would be no additional competition for resources or for students. The

medical schools would organize their courses of instruction in a normal way, designed to fit their students for their own qualifying degrees or higher degrees. Students would enter on these courses, but, independently of the universities, they could present themselves for examination by the examining body, which would in South Africa constitute 'a forum where all and sundry could prove their worth'.

For the qualifying diploma the student who would conform to Medical Council requirements but who could not attain the higher standard for the university qualifying degree could acquire evidence of his fitness for registration by satisfying the examining body's test.

As a result of this alternative being available to candidates, the universities would not be constrained (as they would be if their degrees were the only qualifying certification available) either to limit the standard of their degree to the minimum of Medical Council requirements, or, alternatively, keep students who did comply with these standards from acquiring the necessary certification. Each medical school would be free to set its own standard. There would be no temptation to lower the standard in order to attract students in competition with other schools. On the contrary the better the tuition provided by a medical school for its own qualifying degree, the greater the attraction that school would have for the student, for he would naturally seek the best tuition in the knowledge that if he failed to make the grade of the university degree he would have the diploma of the examining body to subscribe to his fitness for registration. For the higher degrees the universities would similarly be free to set their own standards. The fact that students had an alternative to the degree, viz. the diploma, that would subscribe to their clinical competence, would relieve the universities of any pressure.

Such an examining body could best be established by the creation of a college of physicians and surgeons. The fellows and members of such a college would be drawn from the whole profession and would include the teachers from all the universities. Each fellow or member would be associated with the college in his individual capacity and not by virtue of any office he might hold in a university or other body.

The council of such a college would have as members the leading clinical men throughout the Union, and would be an eminently suitable body to organize and conduct clinical examinations.

The examinations, being open to students from all universities, would necessarily cater for bilingual requirements.

Such a college could be founded as a non-profit-making company, just as is the Medical Association of South Africa.

It could be financed by a group of individuals in the first instance for its immediate financial requirements would not be great; or the establishment of the college could originate through the Association or through its Groups.

Students would in many instances avail themselves of both the university degrees and college diplomas.

Federal Council should commend the establishment of such a college.

**Registration:** A register of specialists has been established by the Medical Council. It is a *fait accompli* and is apparently in conformity with similar moves which are taking place in the U.S.A. and Great Britain. Accordingly it is not recommended that this whole question be re-opened by Federal Council.

Medical Council in the past have registered specialists who satisfied the Council in respect of (1) holding a higher diploma or degree, and (2) producing evidence of satisfactory clinical experience in a speciality. It is presumed that Medical Council will continue with this policy.

It would be competent for Federal Council to recommend that, as far as possible, applicants for specialist registration should present degrees or diplomas indicating a higher standard of attainment in general medicine and general surgery, and that diplomas that subscribe to a higher standard in the speciality alone should not be acceptable. Such special diplomas would be presentable as supporting evidence of special study in the speciality.

It is recommended by the Royal College of Physicians that membership of the college should signify a knowledge of general medicine that justifies further training as a consultant. 'It (i.e. the membership examination) should be taken early in training, normally about two years after qualification'. 'The

Committee thinks it better that the examination should precede specialization.'

**Conclusions:** Federal Council:—

1. Endorses the Medical Council's resolution that 'the Council is not itself concerned to be a teaching or examining body, nor does it consider it desirable that it be officially represented.'

2. Is of opinion that universities should remain autonomous and that no statutory body should combine them.

3. Feels that post-graduate teaching should be confined to the medical schools for the present.

4. Recommends that a liaison committee be established by the universities to correlate their undertakings with the object of making the best use of clinical material and to prevent overlapping of special courses.

5. Recommends that increased financial aid for medical schools be sought from the Government.

6. Recommends that a College of Physicians and Surgeons be established on a non-profit company basis to conduct *inter alia* examinations for qualifying diplomas and for higher diplomas in general medicine.

7. Recommends that registration of specialists should be based on:

(a) Degrees or diplomas indicating a higher knowledge of general medicine or general surgery as distinct from a higher diploma subscribing to a higher knowledge of the speciality alone. A diploma covering both would be acceptable.

(b) Evidence of satisfactory clinical experience in the speciality.

L. B. Goldschmidt  
Convener

#### ADDENDUM

The above report was presented to the Federal Council at its meeting last October and received the full approval of the Council. After discussion Mr. Goldschmidt moved, seconded by Dr. Schaffer, that: 'Whereas Federal Council has approved in principle of the establishment of a College of Physicians and Surgeons;

Whereas the establishment of such a College would be greatly helped if it were organized by a body like the Medical Association of South Africa.

It is recommended that Federal Council sponsor the establishment of a College of Physicians and Surgeons and that it appoint a Committee of Members and Fellows of recognized Colleges to work through and in conjunction with the Head Office of the Association, until such time as the College has reached a stage where it can conduct its own independent affairs.

It is further recommended that, if Federal Council agrees to utilize the organization of the Medical Association of South Africa to establish the College, funds be advanced to the College on loan until such time as the College reaches independent financial status.'

After short debate the Council accepted this recommendation but agreed that no Committee should be appointed at present and that the report, together with the resolution above, should be sent to the S.A. Medical and Dental Council for consideration at the next meeting of interested bodies which would deal with the subject of the establishment of a College. Council further directed that it be published for general information.

A. H. Tonkin,  
Medical Secretary.

10 January 1951.

#### PASSING EVENTS

##### EMPIRE MEDICAL ADVISORY BUREAU

South African medical practitioners who are thinking of visiting the United Kingdom should get into touch with Dr. H. A. Sandiford, Medical Director of the Bureau, at B.M.A. House, Tavistock Square, London, W.C.1, so that all the facilities of the Bureau will be placed at their disposal.

Medical practitioners will find the Bureau helpful in arranging accommodation as well as post-graduate courses of study.

Dr. W. G. Davis has joined Drs. E. C. Greenfield and A. Kippis, pathologists, of Dumbarton House, Adderley Street, Cape Town, as an assistant until the end of June 1951.



Mr. F. R. Leonard, F.R.C.S., has moved his consulting rooms to 22 Medical Centre, Field Street, Durban. Telephones: Consulting Rooms, 6-1654; Residence, 4-9746.

Prof. J. F. Brock has returned to Cape Town after a three months' visit overseas.

Mr. G. Crawshaw, F.R.C.S., has joined Mr. L. Fatti, F.R.C.S., in practice as a Thoracic Surgeon at the Princess Nursing Home, Esselen Street, Johannesburg. Telephone: 44-1955.

#### 'A LONE WOLF'

In the *British Medical Journal* of 16 December it is stated that the *London Gazette* has announced the appointment as M.B.E. (Military Division) to temporary Surgeon Lieutenant-Commander D. S. Macphail, R.N.V.R.

The following facts may interest some who knew Dr. Macphail, during his short stay in the Union. He practised for a time with Dr. Millard at Herschel, and then became house surgeon and later Assistant Medical Superintendent under Dr. Hugo at the Pretoria Hospital.

The following statements have appeared in the press. 'Over six years after he was dropped by parachute into German-occupied Yugoslavia to doctor wounded partisans, Surgeon Lt.-Commander Dugald Stewart Macphail has been awarded the M.B.E.'

An Admiralty spokesman said: 'He was so much a lone wolf out there and so modest about his achievements that only gradually have we been able to piece together his heroic story.'

He established an underground hospital, made frequent trips from one mountain stronghold to another, gave the best possible medical attention to the partisans and remained in charge of the hospital after the main body had been compelled to move on. He was eventually captured by the Germans, and sent as a prisoner of war to occupied Italy. After liberation, he volunteered for service (as parachutist) in Malaya and the Far East.

Macphail, when a student at St. Andrew's University, joined the R.N.V.R. and was called up for service with the Royal Navy when on duty at Pretoria Hospital. He is now practising as a psychiatrist in Harley Street.

### CORRESPONDENCE

#### STEROIDS, VITAMIN C AND SURGERY

*To the Editor:* It would appear that when advocating the use of steroidal hormones and vitamin C as therapy for those about to undergo surgical intervention, I was anticipating a measure which promises to become routine in future surgery, etc.

On the basis that all stress is productive of acceleration of suprarenal cortical hormonal output in the normal person and that the degree of positive defensive reaction can be measured, then it would seem to be right and proper that all of us should become familiar with this work which means so much to the patient.

In the absence of allergy and with freedom from stress, the normal individual should have an eosinophil count of 200 or more per c.mm. of blood. With the aid of the Thorne or Randolph staining technique, eosinophil counting is rendered simple, using the haemocytometer.

The individual under stress and reacting normally to such stress exhibits a rapid and dramatic fall of eosinophils in the blood to a degree of 50% or more. The practical value of the test is contained in two or three observations.

(a) If the patient has reacted normally to the stress of, say, an attack of renal colic, there should be an early marked fall in eosinophil cells as the result of increase in circulating cortical hormones. If this fall does not occur, then defence is poor and this patient is a poor operative risk unless readjusted by injection of A.C.T.H. or of steroidal hormones and vitamin C.

(b) Operation being in itself a severe stress, the normal patient should react by augmentation of hormonal output and

during the subsequent 24 to 48 hours this response should be reflected in a gross fall in the number of circulating eosinophils. Should such fall not occur, the prognosis becomes extremely bad but can be improved by administration of A.C.T.H. or steroidal hormones and vitamin C.

The test will estimate, therefore, whether the patient has stood the initial stress well, whether he has adjusted adequately and is fit for operation and whether he is carrying the burden of operative stress adequately or needs reinforcement.

The Randolph test solutions are as follows:—

Stock Solution 'A'	Stock Solution 'B'
0.1% Methylene Blue in Propylene Glycol.	0.1% Phloxin in Propylene Glycol.

*Before use:* Mix 'A' with an equivalent amount of distilled water and similarly dilute 'B'. Combine a few drops of diluted 'A' with diluted 'B' and use the mixture as the blood-diluting and staining fluid. All eosinophils in the counting chamber appear bright red, all nuclei stain blue and no ghost forms are encountered.

The whole procedure appears to be simple and its importance as an indication of stress reaction appears to be indisputable and of incalculable value to the patient.

J. Drummond.

554 Currie Rd.,  
Corner Haden Rd.,  
Durban.  
22 December 1950.

#### FILM ON CLINICAL LEPROSY

*To the Editor:* In collaboration with the Film Bureau, Department of Education, we have recently completed a film on *Clinical Leprosy*. This is designed for showing to medical students and Medical Associations as a teaching medium. It is 16 mm. sound, colour, 1,000 feet and takes about 30 minutes to show.

It may be obtained free, on loan, from the undersigned.

A. R. Davison,  
Medical Superintendent.

Westfort Institution,  
Pretoria.  
4 January 1951.

#### INDISCRIMINATE USE OF CORTISONE

*To the Editor:* May I be permitted to congratulate the Editor of *Front Page* for his frank expression of views? In the edition of 18 December 1950 informing the profession that Cortisone will soon be available to anybody able to pay for it he states: 'One hopes, however, that when Cortisone is freely available it will not be used indiscriminately in the same manner as Penicillin and other antibiotics.'

It is most unfortunate that the publication is a private one only to doctors, chemists and hospitals. The general public—so gullible—will not read these significant lines expressing very wise and humane warning and fatherly advice to all those who care to take it.

Since Cortisone is still only an experimental drug, I am of the humble opinion that at this stage it should not be made available for general use. It should, however, be the duty of every qualified practitioner intending to use it to enlighten his patient of the dangers (and expense) involved before commencing treatment; moreover, he should obtain a valid legal document for self-protection in case of any argument, especially if insured with any company.

It points to a very high ethical standard indeed that the agents for a drug, which should prove a very good business proposition (having received so much publicity in the lay press) and which, just as the pregnancy blood transfusions, will make so many unfortunate sufferers bitterly disappointed and so very poor, print the above statement in such a frank manner.

N. Finn.

76 Harrow Road,  
Johannesburg.  
10 January 1951.



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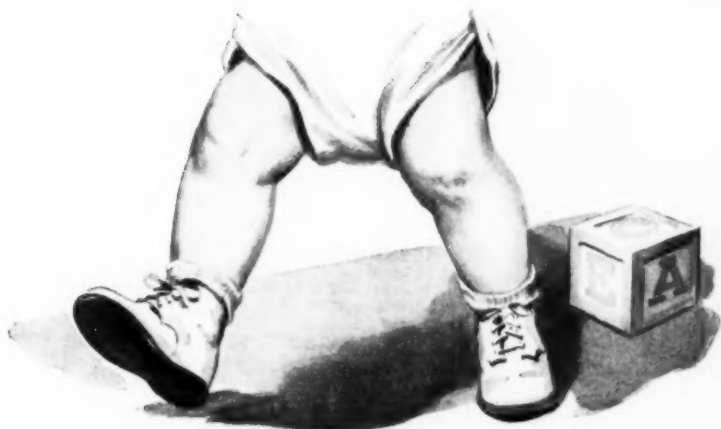
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### PRAKTYKE TE KOOP: PRACTICES FOR SALE

(Pr S19) Vrystaat plattelandse praktyk. Totale jaarlikse bruto-ontvangste £2,700. Premie £750 insluitende instrumente, ens.  
(Pr S14) Transvaal country practice. Income approx. £1,000 p.a. Transferable appointment held. Premium £500.  
(Pr S13) Practice in centre of O.F.S. gold-mining area. Four appointments held. Premium £3,500. Two months' introduction. Large modern house for sale at £4,500.  
(Pr S16) Transvaal hospital town. Income £2,300. No surgery done. Practice is for sale with large house at £5,000.

### ASSISTENTE VERLANG: ASSISTANTS REQUIRED

(A O13) Assistant with definite view in busy Southern Rhodesian Practice. Must be English-speaking Gentle with experience in surgery and all branches of general practice. Age: 25-35 years.

### PRAKTYKE BENODIG: PRACTICES REQUIRED

(P W1) Partnership wanted. G.P. Jewish, aged 36. Surgical Fellowship. Able to do major D.P. surgery. Available February.

(P W2) Partnership wanted in Johannesburg general practice by young doctor experienced in Paediatrics (D.C.H.).

### PLAASVERVANGERS VERLANG: LOCUMS REQUIRED

(L V80) Transvaal, 21/2/51-21/3/51. Must be Gentle with own car. Salary £2 2s. p.d. Hotel and car expenses will be paid.

(L V81) S. Rhodesia. Month of February. Salary £100 p.m. plus free house, servants, and car if required. Must be Gentle.

### CAPE TOWN: KAAPSTAD

Medical House, P.O. Box 643, Cape Town. Telephone 2-6177  
Mediese Huis, Posbus 643, Kaapstad. Telefoon 2-6177

### PRAKTYKE TE KOOP: PRACTICES FOR SALE

(615) Cape Town suburb. Partnership share. Average gross takings of practice £3,000 p.a. for last three years. Jewish partner preferred.

(328) Country hospital town. Half-share partnership general practice. Facilities for major surgery. Good prospects for an F.R.C.S. Premium £1,000 cash. House £2,750, bond for £1,500 available. Gentle preferred.

(g) Unopposed. North-Western hospital village. Gross income year ending January 1950, £5,128. D.S. Premium £2,250. Terms.

(582) Unopposed Eastern Province dispensing practice. M.O.H. appointment. £75 per year. Premium required £100.

(592) Nucleus Cape Town Northern Suburban practice. Adjoining flat and surgery to let, providing excellent accommodation. Premium £400.

(365) North-west Cape. Two appointments held. Gross income 1949 £1,648. Premium £550. House and surgery at low rentals. Nursing home being built. Afrikaans community.

(529) Eastern Province hospital town. D.S. Premium £1,500 includes fully-equipped surgery. Terms if necessary.

### ASSISTENTE VERLANG: ASSISTANTS REQUIRED

(576) St. Matthew's College Mission Hospital, near Alice, E.P., requires resident doctor able to do some surgery. Salary £600 p.a. inclusive of c.o.l. allowance, plus unfurnished house. Beautiful surroundings, bracing climate.

(597) Port Elizabeth. Surgical experience desirable. Gentle English South African. With view to partnership.

### Assistantship

Young doctor seeks assistantship, with or without view to partnership. Union or Rhodesia. Write to 'A. E. X.', P.O. Box 643, Cape Town.

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- Davis and Geck Sutures
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381-383 Boston House,  
Strand Street,  
Cape Town.  
P.O. Box 816.

23 Orion House,  
235 Bree Street,  
Johannesburg.  
P.O. Box 2726.

### Rhodesian Practice For Sale

Radiology practice in Salisbury, Southern Rhodesia, for sale. Average net income, over £400 per month, and practice still expanding. Excellent rooms in centre of city, perfectly equipped with modern machinery. For further details write to 'Radiologist', P.O. Box 643, Cape Town.

### Situation Wanted

Lady with experience and initiative, desires position as Secretary/Receptionist to a doctor in Johannesburg. Able to draft and type own correspondence. Good knowledge of figures. Reply to 'A.E.S.', P.O. Box 643, Cape Town.

### Locum Available

As from March. Male, gentle, aged 26 years. Anywhere, but especially Eastern Province and Border areas. Reply to 'A.E.T.', P.O. Box 643, Cape Town.

### For Sale: Practice

Partnership in old-established Natal city practice. Net income of share offered, £3,000. Write to 'A. E. J.', P.O. Box 643, Cape Town.

### Doctor's Rooms

Share of waiting-room and surgery, fully equipped and furnished, in London & Lancashire House, 148 St. George's Street, Cape Town. For general practitioner or specialist. Apply to 'A. E. U.', P.O. Box 643, Cape Town.

## BRASS PLATES

TO MEDICAL COUNCIL SPECIFICATION

VICTOR C. GLAYSHER

165 BREE STREET  
CAPE TOWN

PHONE  
2-5111

## Public Service Commission

### VACANCIES IN THE PUBLIC SERVICE

1. The attention of medical practitioners, registered with the South African Medical and Dental Council, is drawn to an advertisement appearing in the *Government and Provincial Gazette* of this week, inviting applications for the under-mentioned posts:—

Post	Department/ Administration	Salary scale
Medical Officer	South West Africa Administration	£1,050 × 50—1,200
District Surgeon	Health	£960 × 40—1,120
District Surgeon	Health	£720 × 30—900 × 40—1,020

2. In addition to salary a cost-of-living allowance at the rate of £208 per annum (married) and £50 per annum (single), is payable at present.

3. It is emphasized that full and detailed particulars of qualifications and previous experience (including military service) must be furnished but original certificates and testimonials should not be submitted. Application forms (Z.83 and P.S.C. 8 (a)) are obtainable from the Secretary, Public Service Commission, Pretoria, to whom filled-in forms must be addressed.

4. The closing date for the receipt of applications is 10 February 1951.

No. 26821.

## Natal Provincial Administration

### VACANCIES FOR SENIOR MEDICAL OFFICERS

Applications are invited from registered medical practitioners for appointment to vacant posts of Senior Medical Officer in the Natal Provincial Administration as under:—

(a) King Edward VIII Hospital—Department of Medicine.  
(b) Addington Hospital—Coloured Casualty and Out-patient Department.

The appointments are on twelve months' contract and salaries are as follows:—

(a) Two years' service after qualification £400 per annum all round.

(b) Three years' service after qualification £600 per annum plus free quarters or an allowance in lieu thereof.

(c) Four years' service after qualification £700 per annum plus free quarters or an allowance in lieu thereof.

(d) Five years' service after qualification £800 per annum plus free quarters or an allowance in lieu thereof.

Applications should be addressed to the Director of Provincial Medical and Health Services, P.O. Box 20, Pietermaritzburg, to reach him before 15 February 1951.

Ad. 6046.

## Nichols Fellowship

1. The Council of the Royal Society of Medicine invites applications for a grant of £225 per annum in aid of research to be carried out to advance knowledge in obstetrics and gynaecology, which will be awarded on the recommendation of the Council of the Section of Obstetrics and Gynaecology of the Society.

2. The place at which the work is to be carried out and an outline of the proposed research must be stated in the application.

3. A preliminary report on the progress of the research must be submitted at the expiration of the first six months.

4. The Fellowship will be awarded in the first place for a period of one year and, at the discretion of the Council, may be extended for a second year.

5. Applications must be received by the Secretary, Royal Society of Medicine, 1 Wimpole Street, London, W.1., by 31 March 1951 and candidates must state their position with regard to call-up for Military Service.

## City of Grahamstown

### VACANCY: MEDICAL OFFICER OF HEALTH

Applications are invited for the position of Medical Officer of Health on the salary grade £1,000—50—£1,200 per annum plus transport and cost-of-living allowances. Applicants must be in possession of the Diploma in Public Health.

The successful applicant will be required to furnish a certificate of health, to serve a probationary period of six months, and upon confirmation of the appointment, to contribute to the Joint Municipal Pension Fund.

Applications stating age, marital state, present position, accompanied by full particulars regarding qualifications and experience, must be lodged with the undersigned not later than noon on Saturday, 17 February 1951.

Personal canvassing for the appointment is strictly prohibited and proof thereof will disqualify a candidate for appointment.

W. J. Lagrange

Town Clerk

Notice No. 8—10 January 1951

## Provincial Administration of the

### Cape of Good Hope

#### (HOSPITAL DEPARTMENT)

#### PROVINCIAL HOSPITAL—VACANCY HONORARY MEDICAL STAFF

Applications are invited from registered medical practitioners for appointment to the post of Clinical Assistant to the Urological Department of the Provincial Hospital.

The appointment will be of one year's duration, but may be renewed thereafter.

Applications, containing full particulars of qualifications, etc., must be addressed to the Medical Superintendent, Provincial Hospital, Port Elizabeth, to reach him not later than 17 February 1951.

W. H. Brann

Acting Branch Representative

No. 8981.

Port Elizabeth

9 January 1951

## The Alexandra Health Centre and

### University Clinic

Applications from suitably qualified medical practitioners are invited for the following posts in the above-mentioned institution:

(a) Medical Superintendent on a scale of £1,000 × £50—£1,500 per annum inclusive of cost-of-living allowance. The initial salary will be fixed in accordance with experience and qualifications. The applicant must assume duty on or about 21 May 1951.

(b) Part-time Medical Officer, on a part-time basis, for six morning sessions per week (24 hours per week). Salary £480 per annum inclusive of cost-of-living allowance. Duties to be assumed on 1 June 1951.

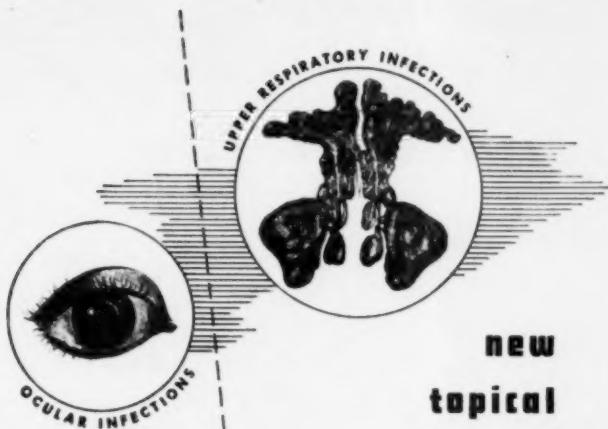
Applicants are advised in the first instance to communicate, not later than 28 February 1951, with the Assistant Registrar, Medical School, Hospital Hill, Johannesburg, from whom full particulars are available.

6212.

### Practice for Sale

Well-established Physician's practice for sale. Well-equipped and designed consulting rooms in centre of Pretoria, reasonable rental, premium merely nominal in deceased Estate. Reference books and medical equipment, including Electro Cardiograph and B.M.R. apparatus and furniture can also be taken over and if required also large dwelling-house in Arcadia. Apply: W. F. van der Merwe & Co., P.O. Box 499, Pretoria. Attorneys for Executor Duties.





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SULFAMYLON—4-aminomethylbenzene-sulfonamide, a new sulfonamide compound which is not inhibited by para-aminobenzoic acid—effectively controls upper respiratory, ocular and wound infections. Sulfamylon is bactericidal for a wide range of gram negative and gram positive bacteria including anaerobes (gas gangrene). Applied topically by swab, instillation, irrigation, atomizer or wet dressings.

Sulfamylon hydrochloride available in 1 per cent. solution, bottles of 1 fl. oz. and 8 fl. oz. Also in combination of 100 cc. vials of 5 per cent. solution with vial of *Streptomycin* sulfate 20,000 units.

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A stable, synthetic sweetening agent with no caloric value. For use in diabetic, reducing or other diets in which sugar is forbidden or the amount limited.



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